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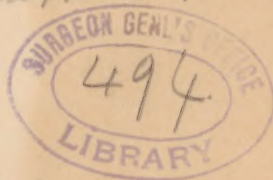
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SOME CONDITIONS AFFECTING THE
HEALTH OF STUDENTS.

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Read at the Annual Meeting of the Massachusetts Medical Society,
June 13, 1893.

presented by the author.



SOME CONDITIONS AFFECTING THE HEALTH OF STUDENTS.

THE influences that have a bearing on health are many, and there is a negative as well as a positive aspect of the subject, the preservation of health depending fully as much upon leaving certain things undone as it does upon doing others.

What applies to mankind in general also applies to the undergraduates of our universities and larger colleges.

The majority of students at these institutions are between seventeen and twenty-five years of age. They are, or should be, situated under as favorable sanitary conditions as mankind at large. They have passed the age at which certain diseases are most prevalent. They are approaching the age at which phthisis is beginning to reap its harvest. They have not yet reached the age when the diseases of degeneration are active as causes of death. The mortality among them should, therefore, be low.

As a matter of fact among mankind at large the mortality between the ages of seventeen and twenty-five has risen but slightly above its lowest point. It is manifestly impossible to consider at present more than a few of the conditions which affect health. Let us then consider briefly those conditions affecting students which should be amenable to control to a greater or less degree. From what one hears and reads it is difficult to avoid the belief that there is an opinion abroad in some quarters, that a large part of the time of the undergraduates at our educational institutions is passed in training for athletic contests or in a round of dissipation; and



possibly some ignorant persons may really think that this is a correct representation of college life. Now I feel sure that any unbiased investigator who will look into this subject carefully will be led to the conclusion that the morals of undergraduates, as a class, compare favorably with those existing among an equal number of men of the same age and social position taken at random from the community at large. At any rate that is the opinion at which I have arrived. Regarding athletes they are, as compared with the whole number of students, but few, and always must be so; for the true athlete, like every real artist, is born, not made. Much has been written about training, as if by some mysterious process an athlete could be developed out of any sort of material. As I understand training it is a process by which a man is put into a condition which enables him to make the greatest skilled muscular effort of which he is capable in a certain way, for a certain time. It may be beneficial to health, but that is not its object. You must have the proper material to work on, or all the training in the world will be of no avail.

At many colleges large sums of money have been spent on the various preparations necessary for athletic contests, and a great deal of time and labor devoted to them. At some colleges special privileges have been granted to the men composing the athletic teams.

Has an equal amount of attention been given to the care of the health of the students, considered in the light of a subject in no way connected with muscular development? What I know about this matter relates mainly to Harvard University, but I am disposed to think that other colleges would not be found to be superior to her in this respect. I am, and for more than thirty years have been, interested in athletic sports, but I hold it true that the first duty of a great educational institution is to the scholar:—not to his intellectual needs alone, but to everything that makes for the

preservation and improvement of health as well. None can know better than the body of physicians here assembled that the use which a man may be able to make in his life work of the knowledge acquired during his school and college days will depend largely on the condition of his health. Physical exercise has been a mania for some time, and much nonsense has been written about it. Even so great an authority as Dr. Parkes says, in his *Practical Hygiene*, "Exercise is a paramount condition of health, and the healthiest persons are those who have most of it." Exercise in the proper amount is indeed one of the means conducive to the preservation and improvement of health, but there are others as important, and some more so. The scholar should always bear in mind that in his case exercise is intended as a means to health which shall enable him to do his proper work in the best manner. He should never try to combine great mental with great bodily labor. I feel sure from personal experience and from what prominent athletes have told me, that it cannot be done with safety. Clement Dukes, speaking from his large experience, says: "Severe brain work precludes much bodily labor; and severe bodily labor prevents great mental work; both cannot be borne together, it is intemperate to try; but the best amount of work is done with a reasonable proportion of each."

One reason for this incompatibility is probably due to the fact that complicated muscular movements and those exercises to which close attention must be given necessitate in reality severe mental work, and therefore do not afford the relaxation needed by a tired brain. To say that both have been done in some cases with impunity is only saying that exceptional persons exist, which no one will deny. It is customary for the student who seeks health to take a part at least of his exercise in a gymnasium. As the respiratory needs, and the amount of effete material given off during exercise are increased, it is very important that the ventila-

tion of the building in which exercise is taken should be as perfect as possible, a subject which has, I fear, received but little attention in some gymnasia.

De Chaumont's test of the impurity of air contaminated by animal emanations, that derived from sense of smell, can be strikingly exemplified by any one who will pass from a pure atmosphere out of doors into some gymnasia when a large number of persons are exercising therein.

There has existed for some time at Harvard University an antipathy, among many of those taking part in athletic sports and exercising in the gymnasium, to have the exercising clothes washed, it being considered preferable that they should be worn until too rotten for further use. There are in the Heminway gymnasium some fifteen hundred lockers for the reception of the clothing used during exercise, situated in the basement and upon the first floor. Such ventilation as there is from these lockers is immediately into the building, and considering the condition of their contents cannot but increase the impurity of the air supplied for respiration.

At a certain period of the world's history we know that sanctity and somatic filth were in some cases closely linked together, but now-a-days we are rather disposed to consider them as mutually exclusive, as health and filth certainly are. "Evil communications," we read, "corrupt." I have been told that in the new gymnasium at a sister University this insanitary arrangement of the lockers has been imitated.

"Of all conditions that are prejudicial to the healthfulness of the dwelling, air that has been rendered impure is the most productive of evil." One of the many causes which renders the air of dwellings impure is the presence of man exhausting the oxygen by respiration, and adding to the air various animal emanations.

It has been computed that 3000 cubic feet of air must be

supplied hourly to each man to enable him to obtain the necessary amount of oxygen, and that in an ordinary room in the temperate zone the air cannot be changed more than three times in an hour without causing a draft that is unpleasant or dangerous. One thousand cubic feet of air space is then the minimum for a room (the air of which can be changed three times every hour) necessary to keep that air in proper condition. The bed-room of course needs the most attention, it being ordinarily an easy matter to open the windows of the day room when its atmosphere becomes foul, or even to go out of doors for a change. One difficulty here, however, is that starting with pure air in the room the inmate is not likely to notice the gradual contamination until it becomes excessive, while another person entering from without finds the atmosphere oppressive. In the unconsciousness of sleep the bed-room air may of course be much further polluted.

The double window, sometimes used in winter, tends to make matters worse, and many bed-rooms have no fireplace to aid ventilation even in a slight degree.

I presume every practising physician has had experience of this disgusting bed-room air stink. Then there is that abomination, the alcove, with, in some cases, about floor space enough to hold the bed, a wash-stand, a chair, and a trunk; and, to make matters worse if possible, in some cases a heavy curtain, reaching from the ceiling to the floor, between the alcove and the living room. Nor can those bed-rooms abutting upon a well or air shaft be regarded much more favorably. This condition of things exists in Cambridge in some of the private buildings and in some of the college halls. We know that the sun is the great life-giver, and I read in good authorities that direct sunlight is a powerful germ-killer. There are many bed rooms in the lodging houses, private buildings and college halls in Cambridge into which no ray of sunlight has ever penetrated since they

were first enclosed within four walls. Last year the Boston Board of Health passed some regulations providing, among other things, that every building used as a stable for cows should contain at least 1000 cubic feet of space for each animal, and be well lighted and ventilated. Is the health of a man of less importance than the health of a cow!

Good food in proper quantity is another important factor in the preservation of health. A healthy organism is not built up out of poor material. We are careful to have an engine which is intended to do first-class work constructed of good stuff, and supplied with the right kind of fuel to run it properly. In man food is the stuff of which the engine is built, and the fuel with which it is run. Some here have had occasion to see professionally students in straitened financial circumstances struggling to get an education, while trying to keep body and soul together on food deficient in quantity or improper in quality, or both, and to note the injurious effects produced thereby on mental and bodily health. It is pitiful, it is heroic, but it is unphysiological, and will sooner or later, in the majority of cases, bring disaster where success was so richly deserved. Surely the intellectual agonist needs food proper in quality and quantity no less than his brother, the physical athlete.

The moral life of men is confessedly a difficult subject to handle, and in connection with it we realize vividly the truth of the words: "The evil that men do lives after them." In the case of undergraduates, however, the opportunities for effecting improvement in this direction are, I think, such as are offered in an equal degree by no other place or time. Most students enter college at an age when the habits are still in a semi-fluid state, though soon set into rigidity. In such a condition of affairs they should be open to good as well as to evil influences.

They are also collected together within a comparatively small area, and an arrangement could easily be made giving

them access to a competent college officer, who should discuss these matters with them, not dogmatically, but as one man with another. The formal lectures and addresses to students inculcating upon them man's moral duties I believe to be in the majority of cases utterly worthless. In some cases, perhaps in many, an act that may blast the whole after life, and entail misery upon others than the original sufferer, is done in ignorance of the far-reaching and disastrous results that may follow in its train. Not infrequently the interval between cause and effect is a long one, and few, save those specially trained, will seek the explanation of an illness in an action many years antecedent, even if it has not entirely escaped the memory. No better opportunity could be offered than that supplied at a great university for supervising the conditions that affect health, and for benefiting in innumerable ways the health of those who have enrolled themselves as students within its walls. I would therefore suggest, subject to such modifications as the circumstances of particular cases might render necessary, the appointment of an official to be known as the Medical Officer of Health to the University, or College, whose qualifications and duties should be somewhat as follows :

The Medical Officer of Health to the University.

He shall be a doctor of medicine, but while holding this position he shall not be engaged in the practice of his profession, nor shall he hold any other position to which emolument is attached.

He shall have supervision of the sanitary condition of all the buildings belonging to the University, visiting them frequently, and reporting thereon to the proper authorities at stated times, and at any time when, in his opinion, immediate action is necessary.

He shall make an arrangement with the local health authorities whereby he shall be kept informed of the sanitary

condition of all buildings, not belonging to the University, wherein members of the University lodge, and also of the occurrence in said lodging-houses of such diseases as are required to be reported to the local health authorities. All members of the University shall be at liberty to communicate with him regarding any supposed insanitary conditions of their lodgings, and he shall cause said conditions to be investigated, and, so far as lies in his power, take measures for their abatement.

He shall satisfy himself that any member of the University who is ill receives proper medical attendance.

He shall have daily office hours wherein he may be consulted on sanitary and hygienic subjects, but any advice he may give shall not extend to the treatment of disease.

He shall, free of charge, examine, and certify to the condition of, any student applying for pecuniary aid to the University.

He shall keep a record of the health of each student previous to his joining the University, which record shall be made out by the parent or person standing *in loco parentis* upon a blank form supplied for this purpose; and said record shall be a confidential communication to the Medical Officer of Health.

PROPOSED FORM OF RECORD.

Name.	Date of Birth.	Birthplace.
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Has he been successfully vaccinated?

Has he had measles, scarlet fever, whooping cough, rheumatic fever, hernia, any heart affection, or any other serious illness?

Has he had good health from birth? If not, give particulars. (Statement of family physician will be of great value.)

Is there anything in his condition that would make taking part in athletic contests undesirable?

FAMILY HISTORY.

	<i>Living.</i>		<i>Dead.</i>	
	<i>Age.</i>	<i>Health.</i>	<i>Age.</i>	<i>Cause of Death.</i>
Father				
Mother				
Brothers				
Sisters				

Is there any constitutional or hereditary disease in the family other than appears above, *i. e.* among uncles and aunts?

Is there anything else which it would be well for the Medical Officer of Health to know?

Signature,

Relation of signer,

This is a confidential communication.

Should some such plan as this meet the approval of the Massachusetts Medical Society, I think its chance of adoption would be materially improved.

